

ATP-Red 1

Chemical Properties

CAS No. : 1847485-97-5

Formula: C₃₄H₃₆BN₃O₄

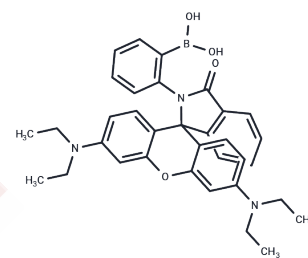
Molecular Weight: 561.48

Keep away from direct sunlight, Store at low temperature

Storage:

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	ATP-Red 1 is a fluorescent probe with good membrane permeability that selectively and rapidly responds to intracellular ATP concentrations in live cells.
Targets(IC50)	Others
In vitro	The maximum absorption and emission wavelengths of ATP-Red 1 are 570/566 nm and 590/585 nm. ATP-Red 1 has good membrane permeability, and in the presence of 5 μ M ATP, the fluorescence intensity of ATP-Red1 increases 5.6-fold. ATP-Red1 (2.5 μ M, 20min) shows much weaker fluorescence after KCN-induced inhibition of OXPHOS, which results in reduced mitochondrial ATP levels in OSCC cells.

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble) DMSO: 40 mg/mL (71.24 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (3.56 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.781 mL	8.905 mL	17.8101 mL
5 mM	0.3562 mL	1.781 mL	3.562 mL
10 mM	0.1781 mL	0.8905 mL	1.781 mL
50 mM	0.0356 mL	0.1781 mL	0.3562 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Wang L, et al. A Multisite-Binding Switchable Fluorescent Probe for Monitoring Mitochondrial ATP Level Fluctuation in Live Cells. *Angew Chem Int Ed Engl.* 2016 Jan 26;55(5):1773-6.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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